

### **AMENDMENTS TO THE CLAIMS**

Please enter the cancellation of claims 1-2, 5-11, and 26-31 without prejudice, as set forth in the unentered Amendment and Response under 37 C.F.R. § 1.116, which was previously filed on December 19, 2005 (“the December 19, 2005 Amendment”).

Please enter the amendments to claims 47, 48 and 50 and add new claims 66-68 as set forth in the unentered December 19, 2005 Amendment. A detailed listing of all claims in the application is presented below. This listing of claims replaces all prior versions and listings of the claims in the application.

#### **Listing of Claims:**

1 – 46 (canceled).

47 (previously presented). A recombinant DNA comprising said DNA selected from the group consisting of

a) a recombinant DNA that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 3 wherein the protein elicits an immune response against *E. canis*;

b) a recombinant DNA that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 5 wherein the protein elicits an immune response against *E. canis*;

c) a recombinant DNA that encodes a protein having an amino acid sequence as shown in SEQ.ID. NO. 7 wherein the protein elicits an immune response against *E. canis*;

d) a recombinant DNA that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 9 wherein the protein elicits an immune response against *E. canis*; and

e) a recombinant DNA that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 11 wherein the protein elicits an immune response against *E. canis*.

48 (previously presented). A vector capable of expressing a recombinant DNA comprising:

a) a recombinant DNA inserted into said vector such that a recombinant protein is expressed when said vector is provided in an appropriate host wherein said DNA is selected from the group consisting of:

i) a recombinant DNA sequence that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 3 wherein the protein elicits an immune response against *E. canis*;

ii) a recombinant DNA sequence that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 5 wherein the protein elicits an immune response against *E. canis*;

iii) a recombinant DNA sequence that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 7 wherein the protein elicits an immune response against *E. canis*;

iv) a recombinant DNA sequence that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 9 wherein the protein elicits an immune response against *E. canis*; and

v) a recombinant DNA that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 11 wherein the protein elicits an immune response against *E. canis*.

49 (original). The recombinant DNA of claim 47 wherein said DNA encodes at least one immunogenic epitope.

50 (previously presented). A vector capable of expressing a recombinant DNA comprising:

a) a recombinant DNA inserted into said vector such that a recombinant protein is expressed when said vector is provided in an appropriate host wherein said DNA is selected from the group consisting of:

- i) a recombinant DNA that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 3 wherein the protein elicits an immune response against *E. canis*;
- ii) a recombinant DNA that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 5 wherein the protein elicits an immune response against *E. canis*;
- iii) a recombinant DNA that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 7 wherein the protein elicits an immune response against *E. canis*;
- iv) a recombinant DNA that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 9 wherein the protein elicits an immune response against *E. canis*; and
- v) a recombinant DNA that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 11 wherein the protein elicits an immune response against *E. canis*.

51- 65 (canceled).

66 (previously presented). The recombinant DNA of claim 47 comprising said DNA selected from the group consisting of:

- b) a recombinant DNA that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 5 wherein the protein elicits an immune response against *E. canis*;

- c) a recombinant DNA that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 7 wherein the protein elicits an immune response against *E. canis*; and
- d) a recombinant DNA that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 9 wherein the protein elicits an immune response against *E. canis*.

67 (previously presented). The vector of claim 48 wherein said DNA is selected from the group consisting of:

- ii) a recombinant DNA sequence that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 5 wherein the protein elicits an immune response against *E. canis*;
- iii) a recombinant DNA sequence that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 7 wherein the protein elicits an immune response against *E. canis*; and
- iv) a recombinant DNA sequence that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 9 wherein the protein elicits an immune response against *E. canis*.

68 (previously presented). The vector of claim 50 wherein said DNA is selected from the group consisting of:

- ii) a recombinant DNA that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 5 wherein the protein elicits an immune response against *E. canis*;
- iii) a recombinant DNA that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 7 wherein the protein elicits an immune response against *E. canis*; and

iv) a recombinant DNA that encodes a protein having an amino acid sequence as shown in SEQ. ID. NO. 9 wherein the protein elicits an immune response against *E. canis*.